CLEVELAND™
AIRPORT SYSTEM

**Date:** April 17, 2015

**To:** Prospective Proposers

**From:** City of Cleveland, Department of Port Control

**Subject:** Addendum No. 2 to Request for Qualifications – **North Airfield Reconfiguration Project.**

Please be advised that the City of Cleveland, through its Director of the Department of Port Control ("Department"), hereby publishes Addendum No. 2 to the Request for Qualifications – North Airfield Reconfiguration Project, dated April 1, 2015.

This addendum number two (2) serves to publish the questions that were submitted for the **North Airfield Reconfiguration Project RFQ.**

**DEADLINE FOR INQUIRIES:** Wednesday, April 15, 2015, 5:00 p.m. local time
**SUBMITTAL DEADLINE:** Wednesday, April 29, 2015, 4:00 p.m. local time

1. Will limits include any full page graphics developed to depict project phasing page?

   *Answer: The Project phasing is not included in the overall sheet count. The Department of Port Control would like to limit the number of sheets devoted to phasing to 4.*

2. Can 11X17 paper be used for graphics? If so, does an 11X17 count as a single page?

   *Answer: 11X17 or 8.5 x 11 will both count as one sheet for graphics.*

3. In Addendum No. 1, it stated that the sign in sheet would be included. I did not see it. Can you please provide the sign in sheet?

   *Answer: Please see Attachment A*

4. Will NEPA documentation be required of the consultant's scope or will NEPA be handled under a separate contract?

   *Answer: NEPA documentation will not be a part of the Consultant's scope.*

5. Can the SMCGS route(s) be provided in order to help with the schematic phasing plans?

   *Answer: Please see Attachment B.*

6. The design portion of the project has been stated to be Task Order #1 and Task Order #2. Will both task orders be issued in 2015 or is there a possibility that one will be issued in 2015 and one in 2016 due to FAA Funding?

   Answer: The Department of Port Control intends to award both Task Orders in 2015. However; there is a possibility that Discretionary funding will not be available and Task Order 2 will be deferred.

7. Please clarify the time proposals are due on April 29, 2015. The City of Cleveland website states that they are due at noon and the RFQ has them due at 4:00 p.m.

   Answer: The deadline should be 4:00 PM.

8. May we use the CLE logo in our proposal and possible presentation for this RFQ?

   *Answer: Yes*

9. I am sending this email to inquire if Solar Testing Laboratories, Inc. can provide Geotechnical Engineering and/or QA Services to other consultants that may enter in a contract with working for the Department of Port Control. We wish to avoid any possible conflict of interest.

   *Answer: A Consultant currently under contract with the Department of Port Control may enter into a contract as a prime or subconsultant for this Project. A Consultant may not enter into a contract with both the design Consultant and Prime Contractor.*

10. Can you please confirm whether or not the NEPA Processing will be required by the selected consultant for this project or if this will be handled by others?

    *Answer: Please see Question 4.*

North Airfield Reconfiguration Project
Pre-Qualification Meeting
April 8, 2015

| NAME | REPRESENTING | PHONE | EMAIL |
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North Airfield Reconfiguration Project
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April 8, 2015

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North Airfield Reconfiguration Project
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April 8, 2015

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North Airfield Reconfiguration Project
Pre-Qualification Meeting
April 8, 2015

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| | | | |
| | | | |

***Cleveland Hopkins International Airport***

# Surface Movement Guidance and Control System

# Plan

CLE™

CLEVELAND HOPKINS
INTERNATIONAL AIRPORT

**Plan for the controlled movement of aircraft during low-visibility conditions**

# Signature Page

## Effective Date 1/1/2013

| Affiliation | Title | Name | Signature |
|---|---|---|---|
| CLE Airport Administration | Airport Commissioner | Fred S. Szabo | |
| FAA Air Traffic Control | Air Traffic Manager | Vince Shobe | |
| FAA Airports Division | Airport Certification / Safety Inspector | Tricia Halpin | |
| FAA Next Gen Branch | Branch Manager | Scott E. Brown | |

# REVISION LOG

| Remove Pages | Dated | Insert Pages | Dated | Revision |
|---|---|---|---|---|
| All | | All | 5/2/03 | Complete plan revision, 5/2/03. Full plan replacement. |
| i, 3-17 | 5/2/03 | | | Plan update. |
| | | I | 6/12/03 | Update of Table of Contents |
| | | 3-8 | 6/12/03 | 3.1, a., b., c., and d.; Update of runway information. 3.2; update of taxiway centerline lighting information. 3.3; update of in-pavement and elevated runway guard light locations. 3.4; update of AMASS / ASDE-3 relationship. |
| | | 9-12 | 6/12/03 | 6.1; update of runway and AMASS/ASDE-3 information. 6.3; update of runway information. 6.4; update of low-visibility departure taxi routes. |
| | | 13-15 | 6/12/03 | 6.6; update of low-visibility arrival taxi routes. |
| | | 16-17 | 6/12/03 | 7.1; update of runway information. 7.2; redefine the ATCT responsibilities concerning aircraft movement. 7.3, 7.4; ATCT control of taxiing aircraft text moved to section 7.4. |
| | | 18-22 | 6/12/03 | 9.1 & 9.2; update of the near and long-term plans for the SMGCS plan. |
| All | 6/12/03 | All | 9/30/04 | Page numbering sectioned to allow for single page changes. |
| | | | | **All pages replaced, but only following contain content changes.** |
| | | I | 9/30/04 | Signature page added. |
| | | 3-3 | 9/30/04 | Section 3.7 added to address out of service components. |
| | | 6-2 – 6-5 | 9/30/04 | 6.4, a., (5); addition of taxi departure route from I-X Jet ramp. 6.4, b., (5); addition of taxi departure route from I-X Jet ramp. 6.4, c., (5); addition of taxi departure route from I-X Jet ramp. 6.4, d., (5); addition of taxi departure route from I-X Jet ramp. 6.6, a., (1); addition of taxi arrival route for I-X Jet ramp. 6.6, b., (1); addition of taxi arrival route for I-X Jet ramp. 6.6, c., (1); addition of taxi arrival route for I-X Jet Center ramp. |
| | | 9-1 | 9/30/04 | Plan/milestones updated. |
| | | 12-1 – 12-4 | 9/30/04 | Updated low-visibility taxi charts. |
| 6-2 | 9/30/04 | 6-5 | 10/1/04 | 6.6, a., (2); correction of exit taxiway name. |
| **All** | | **All** | **9/30/04** | **All page dating changed to ensure current plan.** |
| | | | | **All pages replaced, but only following contain content changes.** |
| i | 9/30/04 | i | 10/26/04 | Addition of FAA AWO program manager signature box. |
| 3-1 – 3-3 | 9/30/04 | 3-1 – 3-3 | 10/26/04 | 3.2, a. – j.; Identification of taxiway lead-off centerline lighting locations. 3.7; addition of provision for ATC to use alternate taxi routes. |
| 6-4 | 9/30/04 | 6-4 | 10/26/04 | 6.4, c., (4) & 6.4, d, (4); modification to hold short at Ry 24R ILS holding position when taxiing east on Twy S. |
| 10-1 | 9/30/04 | 10-1 | 10/26/04 | Updated revision page |
| 12-1 – 12-4 | 9/30/04 | 12-1 – 12-4 | 10/26/04 | Update of all low-visibility taxi charts. |
| 3-1 – 3-3 | 10/26/04 | 3-1 – 3-3 | 12/3/04 | 3.2; remove "high-intensity" due to mixture of taxiway centerline lighting. |
| 6-2 – 6-3 | 10/26/04 | 6-2 – 6-3 | 12/3/04 | 6.4, a., (4) & 6.4, b., (1) to (5); redefine holding position. |
| i | 10/26/04 | i | 11/8/06 | Updated ATC Manager name |
| 3-1 – 3-3 | 12/3/04 | 3-1 – 3-3 | 11/8/06 | 3.2, clarified location of taxiway edge and centerline lighting |
| 5-1 | 10/26/04 | 5/1 | 1/8/06 | 5.4, updated driver training information |
| 6-2 – 6-10 | 10/26/04 | 6-2 – 6-10 | 11/8/06 | 6.4, revised routes to include movement to deicing pad if necessary |
| 7-1 | 10/26/04 | 7-1 | 11/8/06 | 7.4, updated to include taxi to deice pad if necessary |
| 10-1 | 10/26/04 | 10-1 | 11/8/06 | Updated revision page |
| 11-1 – 11-2 | 10/26/04 | 11-1 – 11-2 | 11/8/06 | Updated distribution list information |
| 12-1 – 12-4 | 10/26/04 | 12-1 – 12-4 | 11/8/06 | Updated low-visibility taxi route charts |
| **All** | | **All** | **11/20/08** | **All page headers/footers changed to update airport logo and add FAA AWO signature block** |
| | | | | **All pages replaced, but only following contain content changes** |
| i-ii | 11/8/06 | i-ii | 11/20/08 | Removal of principals signature page (not required) & update of table of contents |

| Remove Pages | Dated | Insert Pages | Dated | Revision |
|---|---|---|---|---|
| 1-1 | 10/26/04 | 1-1 | 11/20/08 | Addition of information from FAA Flight Ops regarding authorization of aircraft operations during conditions below approved SMGCS minima |
| 2-1 – 2-2 | 10/26/04 | 2-1 – 2-3 | 11/20/08 | Addition of definition of CDF and update to SIDA definition |
| 3-1 – 3-3 | 11/8/06 | 3-1 – 3-3 | 11/20/08 | Update of available runways, runway length and lighting information, and taxiway lighting information |
| 5-1 | 11/8/06 | 5-1 – 5-1 | 11/20/08 | Update of vehicles with authorized movement area access; update of VSR definition |
| 6-1 | 10/26/04 | 6-1 | 11/20/08 | Identification of geographic position marking locations |
| 6-2 – 6-8 | 11/8/06 | 6-2 – 6-7 | 11/20/08 | Update and consolidation of aircraft taxi routes due to change in airport configuration and to improve readability |
| 7-1 | 11/8/06 | 7-1 | 11/20/08 | Added text to emphasize importance of reviewing low-visibility taxi route charts; update of hand-off position from COA ramp control to ATC |
| 9-1 | 10/26/04 | | | Deletion of plan milestone page (subsequent sections renumbered) |
| 10-1 | 11/8/06 | 9-1 – 9-2 | 11/20/08 | Updated revision page |
| 11-1 – 11-2 | 11/8/06 | | | Deletion of distribution list; plan distributed electronically via list maintained by the Airport Operations Manager (subsequent section renumbered) |
| 12-1 – 12-4 | 11/8/06 | 10-1 – 10-4 | 11/20/08 | Updated low-visibility taxi charts |
| | | i | 12/13/12 | Insertion of signature page |
| i & ii | 11/20/08 | ii – v | 12/13/12 | Relocation and update of revision page; updated Table of Contents and added list of exhibits; repagination |
| 3-1 – 3-3 | 11/20/08 | 3-1 – 3-3 | 12/13/12 | Updated to reflect removal of RY 6R lead off lights onto Twy S |
| 5-1 & 5-2 | 11/20/08 | 5-1 & 5-2 | 12/13/12 | Updated driver training information; clarified training requirements; removed COA references |
| 6-1 | 11/20/08 | 6-1 | 12/13/12 | Added reference to ATCT/UAL LOA |
| 6-2 – 6-7 | 11/20/08 | 6-2 – 6-7 | 12/13/12 | Removed COA reference & clarified Atlantic Aviation as GA ramp |
| 7-1 | 11/20/08 | 7-1 | 12/13/12 | Added reference to Concourse-D control |
| 9-1 & 9-2 | 11/20/08 | | | Revision pages relocated |
| 10-1 – 10-4 | 11/20/08 | | | Low-visibility taxi route charts relocated as exhibits |
| | | E-1-1 – E-1-4 | 12/13/12 | Updated low-visibility taxi route charts as exhibits |
| | | E-2-1 | 12/13/12 | Added ATCT SMGCS LOA exhibit |
| E-8-1 | 2/13/13 | E-8-1 | 3/13/13 | Added item "G" responsibility for Airport Operator |

# TABLE OF CONTENTS

## LIST OF EXHIBITS

# 1. INTRODUCTION

1.1 This Surface Movement Guidance and Control System (SMGCS) Plan describes enhancements, procedures, and actions at Cleveland Hopkins International Airport (CLE) that are necessary for low-visibility takeoff and landing operations when the Runway Visual Range (RVR) is below 1,200 feet, down to and including 600 feet. These enhancements, procedures, and actions are in accordance with the guidance contained in FAA Advisory Circular (AC) 120-57, current edition.

1.2 In addition to the above operating parameters, and in accordance with guidance provided by the FAA Flight Operations Branch of Flight Standards, the following operations are also authorized at CLE under this plan:

a. Aircraft operators with approved takeoff minima lower than the approved SMGCS minima of 600' are permitted to continue to taxi for takeoff if they have entered the movement area and the RVR drops below 600'. Aircraft operators who have not entered the movement area are not permitted to taxi when the RVR drops below 600'.

b. Aircraft operators who have passed the final approach fix or landed are permitted to taxi to parking if the RVR drops below 600'.

1.3 The procedures contained in this Plan were developed by the CHIA SMGCS Working Group, which consisted of: The Airport Commissioner, the Airport Operations Manager and staff, FAA Great Lakes Region Flight Standards Office, Cleveland Air Traffic Control Tower (ATCT), Air Carriers, and Airport Tenants. This document does not supersede established policies, procedures, rules, or guidelines for airports, aircraft operators, or Air Traffic Control (ATC). FAR Part 91 operators are encouraged to use the procedures in this plan to enhance the safety of low-visibility operations.

1.4 This plan addresses both current and future enhancements to the airport to support low-visibility takeoff, landing, and taxiing operations. The CLE SMGCS working group will meet as necessary, but not less than once a year, to assess current low-visibility operations and to modify the plan as necessary.

# 2. DEFINITIONS

2.1 **Air Operations Area (AOA)**
This area consists of the runways, taxiways, ramps, and all areas of the airport used or intended to be used for the landing, takeoff, and surface maneuvering of aircraft.

2.2 **Aircraft Parking Positions**
Used for parking aircraft to enplane and deplane passengers, load or unload cargo.

2.3 **Airport Ramp Controllers**
The term refers to personnel from the airlines providing control of the concourse non-movement area.

2.4 **Aircraft Service Areas**
On or adjacent to an aircraft parking position. They are used by airline personnel/equipment for servicing aircraft and staging of baggage, freight, and mail for loading and unloading of aircraft.

2.5 **Centralized Deicing Facility (CDF)**
Deicing facility located in a central point on the airfield for the purpose of deicing aircraft and controlling the spent deicing fluid to minimize the environmental impact.

2.6 **Geographic Position Markings**
Pavement markings used to identify the location of aircraft or vehicles during low-visibility conditions. Referred to as "spots" by ATC and are used to denote specific hold points.

2.7 **Hold Spot**
The term "hold spot" refers to a location where ATC or the airport ramp controller could be expected to hold a taxiing aircraft. Examples of "hold spots" are apron holding location markings, runway holding position markings, taxiway holding position markings, and geographic position markings.

2.8 **Low-visibility Operations**
For the purpose of this plan, low-visibility operations are considered to mean the movement of aircraft or vehicles on the Air Operations Area (AOA) when the visibility conditions are reported to be less than 1,200 feet RVR, down to and including 600 feet RVR.

2.9 **Movement Area**

The term "movement area" refers to the runways, taxiways, and other areas of the airport that are utilized for taxiing, takeoff, and landing of aircraft; and are exclusive of loading ramps and aircraft parking areas. Specific approval from the ATCT must be obtained prior to entering the movement area.

2.10 **Non-movement Area**

The term refers to taxiways and ramps not under the control of the ATCT.

2.11 **Ramp**

The term comprises the area and facilities used for aircraft gate parking and aircraft support and servicing operations.

2.12 **Runway Guard Lights—Elevated**

Fixtures consist of a pair of elevated flashing yellow lights, installed on both sides of a taxiway, at the runway holding position markings. Their function is to confirm the presence of an active runway and assist in preventing runway incursions.

2.13 **Runway Guard Lights—In-pavement**

Fixtures consist of a row of in-pavement flashing yellow lights installed across the entire taxiway, at the runway hold position marking. Their function is to confirm the presence of an active runway and assist in preventing runway incursions.

2.14 **SIDA**

The Security Identification Display Area (SIDA) is any area identified in the airport security program where each person is required to continuously display airport approved identification, unless the person is under airport approved escort. The Secured Area SIDA at Cleveland is an enhanced security zone that encompasses all ramp areas north of Taxiway K to include all contiguous ramp areas up to the fencing and structures used to comprise the inner perimeter boundaries of the airside of the airport. This includes the terminal commercial ramp and the ramp northeast of the terminal. It also includes baggage make-up areas, the "moat" area and concourse ground levels including offices, briefing rooms, operations areas, and all jetways. There are two other SIDA locations at Cleveland. The first is the contiguous primary and secondary hangar area and ramp northeast of the terminal. The second location is the Cargo SIDA locations. These locations include the UPS facility on the northwest side of the airport, the airline cargo buildings on the southeast side of the airport, and the Federal Express facility located just south of the ARFF station.

2.15 **Surface Movement Guidance and Control System**

This system consists of the provisions for guidance to, and control or regulation of, all aircraft, ground vehicle operations, and personnel on the airport during low-visibility conditions. Guidance relates to facilities and information necessary for

pilots and ground vehicle operators to find their way about the airport. Control or regulation relates to the measures necessary to prevent collisions and ensure smooth and efficient traffic flows.

2.16 **Taxi Route**

The term refers to a specific sequence of taxiways or taxiway segments used by aircraft during low-visibility operations when taxiing between the runway and the ramp.

2.17 **Vehicle Service Road**

Identified right-of-ways on the ramp designated for ground service vehicles and ARFF equipment.

# 3. FACILITIES AND EQUIPMENT

## 3.1 Runways

CLE will use four runways for takeoffs, Ry 6R, Ry 6L, Ry 24R, and Ry 24L, and two runways for arrivals, Ry 6L and Ry 24R.

a. Runway 6R landing distance is 8,029' (landing threshold displaced), and departing distance full length is 9,955', and is equipped with touchdown zone lighting, centerline lighting, high intensity edge lighting, runway distance remaining signage, and a MALSR approach lighting system.

b. Runway 24L landing and departing distance is 9,955', and is equipped with touchdown zone lighting, centerline lights, high intensity edge lighting, runway distance remaining signage, and a MALSR approach lighting system.

c. Runway 6L landing and departing distance is 9,000', and is equipped with touchdown zone lighting, centerline lighting, high intensity edge lighting, runway distance remaining signage, and an ALSF-II approach lighting system.

d. Runway 24R landing and departing distance is 9,000', and is equipped with touchdown zone lighting, centerline lighting, high intensity edge lighting, runway distance remaining signage, and an ALSF-II approach lighting system.

## 3.2 Taxiway Lights

Continuous medium intensity blue taxiway edge lights are installed on all taxiways.

Taxiway centerline lead-off lighting is installed at the following locations:

a. Runway 6L exiting eastbound onto Taxiway R.

b. Runway 6L exiting eastbound onto Taxiway B.

c. Runway 6L exiting eastbound onto Taxiway G1.

d. Runway 6L exiting eastbound onto Taxiway S.

e. Runway 6R exiting eastbound onto Taxiway R.

f. Runway 24R exiting eastbound onto Taxiway N.

g. Runway 24R exiting eastbound onto Taxiway P.

h. Runway 24R exiting eastbound onto Taxiway T.

i. Runway 24R exiting eastbound onto Taxiway G.

j. Runway 24L exiting eastbound onto Taxiway H.

Continuous green taxiway centerline lights are installed in the following locations:

a. Taxiway L starting 350 feet south of the Twy M1 intersection, and turning onto Taxiways A and R, and ending at the end of the centerline turns.

b. Taxiway H on the turns onto Taxiways K and L, starting at the beginning of the centerline turn and ending at the end of the turns on Taxiways K and L. There are two separate sets of lights.

c. Taxiway G, full length.

d. Taxiway T between Runway 6L and Taxiway G.

e. Taxiway P between Runway 6L/24R and Runway 6R/24L.

f. Taxiway N between Runway 6L/24R and Twy C.

g. Taxiway K between Runway 6L/24R and Twy C.

h. Taxiway R between Twy C and Taxiway V.

i. Taxiway B between Twy C and Taxiway S.

j. Taxiway V between Taxiway B and Taxiway R.

k. Taxiway G1 between Runway 6L/24R and Taxiway G.

l. Taxiway S between Twy C and Taxiway B

m. Taxiway J1.

n. Taxiway J2.

o. Taxiway M.

p. Taxiway M1.

q. Taxiway M2

Taxi routes and taxi procedures are described in paragraph 6, AIR TRAFFIC CONTROL PROCEDURES.

## 3.3 Runway Guard Lights

Elevated runway guard lights (wigwags) are located at the taxiways selected by the SMGCS working group that provide access to Runway 6R/24L and Runway 6L/24R. In-pavement runway guard lights are installed at all taxiways providing access to Runway 6L/24R and at all taxiways over 150 feet in width that provide access to Runway 6R/24L. The lights will be illuminated at all times.

## 3.4 Surface Movement Surveillance

An Airport Movement Area Safety System (AMASS) is installed as part of the Airport Surface Detection Equipment (ASDE-3) radar system, and operates to provide surface movement/occupation surveillance. It is used by the ATCT to augment visual observations of aircraft and vehicles on runways and taxiways and associated movement areas.

## 3.5 Taxiway Guidance Signing and Marking Inspection

Taxiway guidance signs and lighting are inspected routinely by airport operations as part of the FAR Part 139 self-inspection program. This inspection is conducted prior to conducting low-visibility operations, and when requested by the ATCT.

## 3.6 Follow-me Service

The Airport Operations Department will provide "follow-me" service to any aircraft upon request, subject to availability of equipment and the need to accomplish higher priority duties. The Airport Operations follow-me vehicle is identified by yellow flashing emergency lights. A "follow-me" request may be initiated by the pilot or ATC by calling the Operations Office at (216) 265-6090 or by radio on frequency 122.950 MHz, call sign "Cleveland Operations."

## 3.7 Out of Service Components

If any of the lighting components required by this plan are found to be out of compliance with the operating standard, ATC may elect to use an alternate taxi route providing the lighting components on that route meet the requirements contained in FAA Advisory Circular (AC) 120-57. In addition, a follow-me vehicle may be used to retain use of the affected taxi area, or the subject taxi area may be closed by NOTAM.

# 4. AIRCRAFT RESCUE AND FIRE FIGHTING (ARFF)

## 4.1 ARFF Coverage

The ARFF facility is located on the south side of Taxiway K west of Taxiway J. The response time is in compliance with FAR Part 139. During low-visibility operations, equipment and personnel will remain on alert status at the station.

## 4.2 ARFF Coordination

The FAR Part 139 requirement for either a tabletop exercise or a disaster drill is accomplished annually to insure coordination between the ATCT and ARFF.

# 5. VEHICLE CONTROL

## 5.1 Vehicle Access

Vehicle access to the airport is controlled by a system of perimeter fencing and gates. All vehicles and personnel entering the air operations area are subject to the mandatory SIDA inspection procedures that are in effect for the secured areas at CHIA. Airport Security and Airport Operations personnel monitor these procedures.

## 5.2 Access Restrictions

Operations / Security personnel or an approved designee will check the vehicles, drivers, and passengers for the appropriate identifications. Airport Operations personnel and Airport Police patrol all airside areas and are instructed to have unauthorized vehicles and personnel removed from the airport.

Only those vehicles authorized by the airport with functional ATCT ground control radios are allowed on the airport movement area. These vehicles are usually operated by Airport Operations, ARFF, Airport Maintenance, Airport Engineering, Airport Police, United Air Lines (Aircraft Inspection Vehicle), Centralized Deicing Facility (CDF) operator, and FAA Technical Operations Maintenance personnel. In order to gain entry to the movement area, specific approval must be obtained from the ATCT by radio. All other vehicle traffic in the movement area must be escorted by an Airport Operations Vehicle.

When visibility is less than 1,200 feet RVR, down to and including 600 feet RVR, the movement area will be restricted to those vehicles in support of the plan. This will generally include vehicles from Airport Operations, Airport Security, Airport Field and Electrical Maintenance, Airport Police, ARFF, United Air Lines (Aircraft Inspection Vehicle), CDF operator, and FAA Technical Operations Maintenance.

## 5.3 Vehicle Service Roads

Except for necessary movement in leased areas, vehicles on the airfield must be operated within a clearly marked system of vehicle drive lanes identified as the Vehicle Service Road (VSR). The VSR lanes are identified by two outer solid white lines and one dashed centerline.

## 5.4 Driver Training

All airport employees seeking airfield driving privileges are required to attend driver training and pass a written driver's test, doing so initially prior to receiving airfield driving privileges, and every 12 consecutive calendar months in order to retain the privileges. The Airport provides the initial driver training to all airport employees which is managed by the Airport Security Office, and includes the

administration of the written driver's test. The test must be passed before the driver is allowed to operate a vehicle on the airfield. The recurrent training and testing is administered by either the Airport Security Office, or by those airlines authorized to administer the training. Current low-visibility operation information is included in the training documents and in the written test.

# 6. AIR TRAFFIC CONTROL PROCEDURES

## 6.1 Background and Operating Concept

The SMGCS plan provides guidance and control of the aircraft between various ramp locations and Runways 6R/24L and 6L/24R in a safe and efficient manner during low-visibility operating conditions. The coordinated efforts of the ATCT, Cleveland Hopkins International Airport (Operations), and the airport ramp controller are all focused on ensuring safe movement and avoiding inadvertent or unauthorized entry onto the movement area during low-visibility conditions. The coordinated control of aircraft movements between the movement area and the non-movement area that is controlled by United Air Lines (UAL) is detailed in the Letter of Agreement between ATCT and UAL on that subject. When the touchdown RVR for the runway in use is less than 1,200 feet, down to and including 600 feet, SMGCS procedures and restrictions shall be in effect.

Runway 6R, 6L, 24L, or 24R may be used for departing aircraft and Runway 6L or 24R may be used for arriving aircraft.

Geographic position markings are installed at the following locations:

- Position 1J on Taxiway J between Taxiway S and Taxiway W for northeast bound and southwest bound traffic.
- Position 2J on Taxiway J between Taxiway R and Taxiway A for northbound and southbound traffic.
- Position 1K on Taxiway K short of the Taxiway Q intersection for westbound traffic.
- Position 2K on Taxiway K short of the Taxiway L intersection for westbound traffic.
- Position 1L on Taxiway L short of the Taxiway N intersection for southwest bound traffic.
- Position 2L on Taxiway L short of the Taxiway T intersection for southwest bound traffic.

Geographic Position Markings will be used as necessary to locate, control, and hold aircraft during low-visibility conditions. The ATCT will utilize the Airport Surface Detection Equipment (ASDE-3) radar system / Airport Movement Area Safety System (AMASS) to monitor the position and movement of aircraft.

## 6.2 Visibility Reporting

The ATCT will notify CHIA Operations, who in turn will advise the airlines, general aviation tenants, and air cargo operators when the RVR is expected to decrease to less than 1,200 feet. Once the SMGCS plan / procedures are in

effect, the ATCT will put the following statement on the ATIS: "SMGCS plan in effect."

These procedures are terminated by the ATCT when the RVR increases above 1,200 feet. The ATCT will notify CHIA Operations when SMGCS plan is no longer required. Operations will advise the airlines, including general aviation and air cargo operators, that the SMGCS plan is no longer in effect.

## 6.3 Departures

Departing aircraft will be provided with a clear route of access from the ramp exit point to Runway 6R, 6L, 24L, or 24R. ATC will control aircraft by utilizing the geographic position markings, the ASDE-3 / AMASS system, and other approved procedures as appropriate.

## 6.4 Departure routes for RVR below 1,200 feet, down to and including 600 feet

Aircraft pushing back from Concourse-C, Concourse-D, and the south side of Concourse-B will be controlled by United Ramp Control and routed to Hold Spots 1, 2, 3, 4, 5, or 6 for initial contact with ATC for taxiing instructions into the movement area. Aircraft pushing back from the north side of Concourse-B, and Concourse-A, and those taxiing from the south cargo and west side cargo ramps are under direct control of ATC.

Aircraft taxi routes for departure will be dependent on aircraft deicing needs. Aircraft requiring deicing at the Centralized Deicing Facility (CDF) will follow the appropriate taxi route to CDF Pad-1.

### a. Runway 6R departures

(1) **Aircraft departing on Runway 6R from all concourse locations and the south cargo ramp** will:

(a) For aircraft requiring deicing, taxi west and/or south, or north on Taxiway J and taxi into deice Pad-1 via Taxiway J2, Taxiway M1, or Taxiway M2. When exiting deice Pad-1, taxi southwest on Taxiway L, and hold short at the runway holding position for Runway 6R.

OR

(b) For aircraft not requiring deicing, taxi west and/or south, or north on Taxiway J, west on Taxiway K, southwest on Taxiway L, and hold short at the runway holding position for Runway 6R.

(2) **Aircraft departing on Runway 6R from the west side cargo ramp** will taxi southeast on Taxiway B and hold short at the runway

holding position for Runway 6L. With ATCT clearance, the aircraft will continue to taxi southeast on Taxiway B, southwest on Taxiway G, and southeast on Taxiway T to hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will continue to taxi southeast on Taxiway T, southwest on Taxiway L, and hold short at the runway holding position for Runway 6R.

(3) **Aircraft departing on Runway 6R from the general aviation ramp at the south end of Twy L2 (Atlantic Aviation)** will taxi north on Taxiway L2, southwest on Taxiway L, and hold short at the runway holding position for Runway 6R.

b. **Runway 6L departures**

(1) **Aircraft departing on Runway 6L from all concourse locations and the south cargo ramp** will:

(a) For aircraft requiring deicing, taxi west and/or south, or north on Taxiway J and taxi into deice Pad-1 via Taxiway J2, Taxiway M1, or Taxiway M2. When exiting deice Pad-1, taxi southwest on Taxiway L, northwest on Taxiway T, and hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will continue northwest on Taxiway T, southwest on Taxiway G, and hold short at the runway holding position for Runway 6L.

OR

(b) For aircraft not requiring deicing, taxi west and/or south, or north on Taxiway J, west on Taxiway K, southwest on Taxiway L, northwest on Taxiway T, and hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will continue northwest on Taxiway T, southwest on Taxiway G, and hold short at the runway holding position for Runway 6L.

(2) **Aircraft departing on Runway 6L from the west side cargo ramp** will taxi southeast on Taxiway B and hold at the runway holding position for Runway 6L. With ATCT clearance, aircraft will continue to taxi southeast on Taxiway B, southwest on Taxiway G, and hold short at the runway holding position for Runway 6L.

(3) **Aircraft departing on Runway 6L from the general aviation ramp at the south end of Twy L2 (Atlantic Aviation)** will taxi north on Taxiway L2, southwest on Taxiway L, northwest on Taxiway T, and hold short at the runway holding position for

Runway 6R. With ATCT clearance, the aircraft will continue northwest on Taxiway T, southwest on Taxiway G, and hold short at the runway holding position for Runway 6L.

c. **Runway 24L departures**

(1) **Aircraft departing on Runway 24L from all concourse locations and the south cargo ramp** will:

(a) For aircraft requiring deicing, taxi west and/or south, or north on Taxiway J, and taxi into deice Pad-1 via Taxiway J2, Taxiway M1, or Taxiway M2. When exiting deice Pad-1, taxi northeast on Taxiway L, northwest on Taxiway W, and hold short at the runway holding position for Runway 24L.

OR

(b) For aircraft not requiring deicing, taxi west and/or south, or north on Taxiway J, northwest on Taxiway S, northeast on Taxiway L, northwest on Taxiway W, and hold short at the runway holding position for Runway 24L. Alternatively, aircraft may taxi directly via Taxiway J to Taxiway W and hold short at the runway holding position for Runway 24L.

(2) **Aircraft departing on Runway 24L from the west side cargo ramp** will taxi east on Taxiway S and hold short at the ILS critical area for Runway 24R. With ATCT clearance, aircraft will then continue to taxi southeast on Taxiway S and hold short at the runway holding position for Runway 24L. With ATCT clearance, aircraft will then continue to taxi southeast on Taxiway S, northwest on Taxiway L, northwest on Taxiway W, and hold short at the runway holding position for Runway 24L.

(3) **Aircraft departing on Runway 24L from the general aviation ramp at the south end of Twy L2 (Atlantic Aviation)** will taxi north on Taxiway L2, northeast on Taxiway L, northwest on Taxiway W, and hold short at the runway holding position for Runway 24L.

d. **Runway 24R departures**

(1) **Aircraft departing on Runway 24R from all concourse locations and the south cargo ramp** will:

(a) For aircraft requiring deicing, taxi west and/or south, or north on Taxiway J and taxi into deice Pad-1 via Taxiway J2, Taxiway M1, or Taxiway M2. When exiting deice Pad-1, taxi northeast on Taxiway L, northwest on Taxiway S, and hold short at the runway holding position for Runway 24L. With ATCT clearance, aircraft will then continue to taxi northwest on Taxiway S and hold short at the runway holding position for Runway 24R.

OR

(b) For aircraft not requiring deicing, taxi west and/or south, or north on Taxiway J, northwest on Taxiway S, and hold short at the runway holding position for Runway 24L. With ATCT clearance, aircraft will then continue to taxi northwest on Taxiway S and hold short at the runway holding position for Runway 24R.

(2) **Aircraft departing on Runway 24R from the west side cargo ramp** will taxi east on Taxiway S and hold short at the ILS critical area for Runway 24R.

(3) **Aircraft departing on Runway 24R from the general aviation ramp at the south end of Twy L2 (Atlantic Aviation)** will taxi north on Taxiway L2, northeast on Taxiway L, northwest on Taxiway S, and hold short at the runway holding position for Runway 24L. With ATCT clearance, the aircraft will then continue to taxi northwest on Taxiway S and hold short at the runway holding position for Runway 24R.

## 6.5 Arrivals

Arriving aircraft will be provided with a clear route of access from the runway used to the ramp entry point. ATC will control aircraft by utilizing the geographic position markings, the ASDE-3 / AMASS system, and other approved procedures as appropriate.

## 6.6 Arrival routes for RVR below 1,200 feet, down to and including 600 feet

### a. Runway 6L arrivals

(1) **Aircraft landing on Runway 6L bound for parking at the gate, south cargo ramp, or the general aviation ramp at the south end of Twy L2 (Atlantic Aviation)** will exit the runway easterly using Taxiway R, Taxiway B, Taxiway G1, or Taxiway S, and:

(a) Aircraft on Taxiway R will taxi east on Taxiway R and hold short at the runway holding position for Runway 6R. With ATCT

clearance, the aircraft will then continue to taxi east on Taxiway R, and north or south on Taxiway J to parking; aircraft bound for Atlantic Aviation will taxi south on Taxiway J, west on Taxiway K, southwest on Taxiway L, and south on Taxiway L2 to Atlantic Aviation.

(b) Aircraft on Taxiway G1 or Taxiway B will taxi northeast on Taxiway G, southeast on Taxiway S, and hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will then continue to taxi southeast on Taxiway S, and north or south on Taxiway J to parking; Aircraft bound for Atlantic Aviation will taxi south on Taxiway J, west on Taxiway K, southwest on Taxiway L, and south on Taxiway L2 to Atlantic Aviation.

(c) Aircraft on Taxiway S will taxi southeast on Taxiway S and hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will then continue to taxi southeast on Taxiway S, and north or south on Taxiway J to parking; Aircraft bound for Atlantic Aviation will taxi south on Taxiway J, west on Taxiway K, southwest on Taxiway L, and south on Taxiway L2 to Atlantic Aviation.

(2) **Aircraft landing on Runway 6L bound for west side cargo ramp parking** will exit the runway westerly at Taxiway B or Taxiway S and taxi west on Taxiway B or Taxiway S, respectively, to parking.

b. **Runway 24R arrivals**

(1) **Aircraft landing on Runway 24R bound for parking at the gate, south cargo, or the general aviation ramp at the south end of Twy L2 (Atlantic Aviation)** will exit the runway easterly at Taxiway P, Taxiway T, or Taxiway G, and:

(a) Aircraft on Taxiway P will taxi southeast on Taxiway P and hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will then continue to taxi southeast on Taxiway P, northeast on Taxiway L. Aircraft going to Atlantic Aviation will taxi south on Taxiway L2 to parking; gate and south cargo bound aircraft will continue to taxi northeast on Taxiway L, east on Taxiway K, and north or south on Taxiway J to parking.

(b) Aircraft on Taxiway T will taxi southeast on Taxiway T, and hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will then continue to taxi southeast on Taxiway T, northeast on Taxiway L. Aircraft going to Atlantic

Aviation will taxi south on Taxiway L2 to parking. Gate and south cargo bound aircraft will continue to taxi northeast on Taxiway L, east on Taxiway K, and north or south on Taxiway J to parking.

(c) Aircraft on Taxiway G will taxi northeast on Taxiway G, southeast on Taxiway T, and hold short at the runway holding position for Runway 6R. With ATCT clearance, the aircraft will then continue to taxi southeast on Taxiway T, northeast on Taxiway L. Aircraft going to Atlantic Aviation will taxi south on Taxiway L2 to parking. Gate and south cargo bound aircraft will continue to taxi northeast on Taxiway L, east on Taxiway K, and north or south on Taxiway J to parking

(2) **Aircraft landing on Runway 24R bound for west side cargo parking** will exit the runway easterly at Taxiway P, Taxiway T, or Taxiway G. Aircraft will then proceed northeast on Taxiway G and northwest on Taxiway B to hold short at the runway holding position for Runway 6L. With ATCT clearance, the aircraft will then continue to taxi northwest on Taxiway B to parking.

# 7. AIRLINE PROCEDURES DURING LOW-VISIBILITY CONDITIONS

## 7.1 During Low-visibility Conditions

During low-visibility conditions with an RVR of less than 1,200 feet, down to and including 600 feet, aircraft departures are permitted on Runways 6R, 6L, 24L, and 24R, and aircraft arrivals are permitted on Runways 6L and 24R. Pilots conducting low-visibility operations are required to have a copy of the low-visibility taxi route charts. In order to afford the highest degree of safety, the low-visibility taxi route charts should be reviewed prior to taxi operations, and referred to again during taxi operations as necessary.

## 7.2 Ramp Control

Ramp Control coordinators will coordinate the movement of aircraft on the ramps adjoining Concourse-C and Concourse-D, and the southerly side of Concourse-B and at Hold Spots 1, 2, 3, 4, 5, and 6.

The ATCT will coordinate the movement of aircraft on the Concourse-A ramp and on the ramp on the north side of Concourse-B.

## 7.3 Pushbacks

Departing aircraft will contact ATC or Ramp Control on the appropriate frequency prior to push back and will remain on frequency until radio contact is established with Ground Control at the movement area boundary.

## 7.4 Taxiing Progress

After push back, ATC will provide a taxi route from the ramp exit point to the departure runway in use, or to deice Pad-1 first, if necessary. ATC will control aircraft along the taxi route by utilizing the ASDE-3 / AMASS system, taxi hold points, and Geographic Position markings as described in Section 6.

ATC may ask for reports on taxi progress or ask for aircraft to hold at designated taxi Hold Points or at the Geographic Position Marking hold points.

# 8. RESPONSIBILITIES

## 8.1 Airport Operator

a. Conduct meetings of the SMGCS working group.
b. Maintain documentation of working group proceedings.
c. Coordinate, amend, publish, and distribute the SMGCS plan.
d. Monitor adherence to those sections of the plan under the control of the Airport Commissioner
e. Conduct inspections, report failures and provide maintenance of lighting aids associated with the SMGCS plan.
f. Serve as a point of contact for the SMGCS plan and coordinate a review of the plan on an annual basis.
g. Review Siemens Airfield lighting system to confirm circuits associated with the SMSGCS are not in alarm. Circuits found in alarm will be physically inspected.

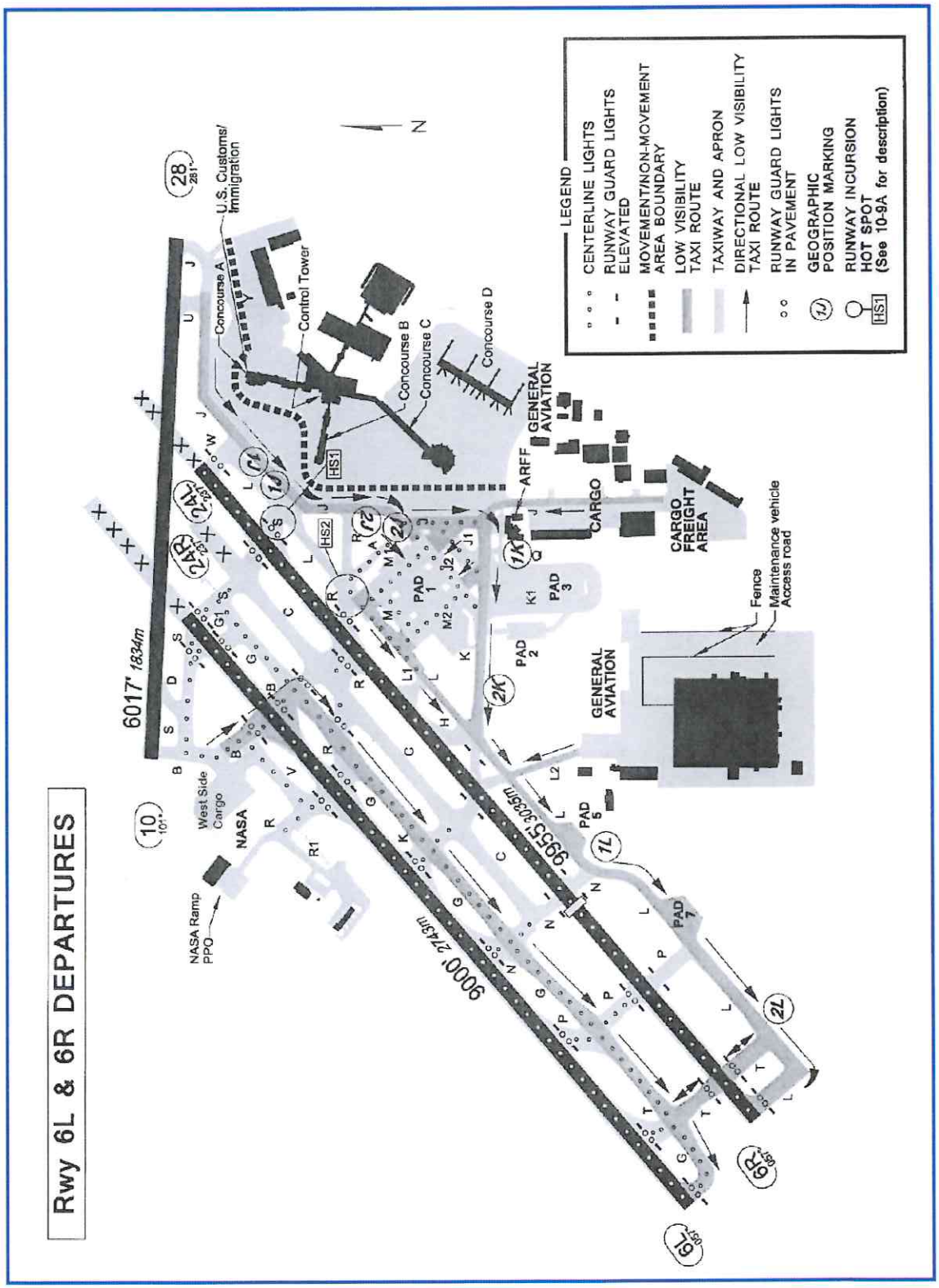
## 8.2 Airport Traffic Control Tower

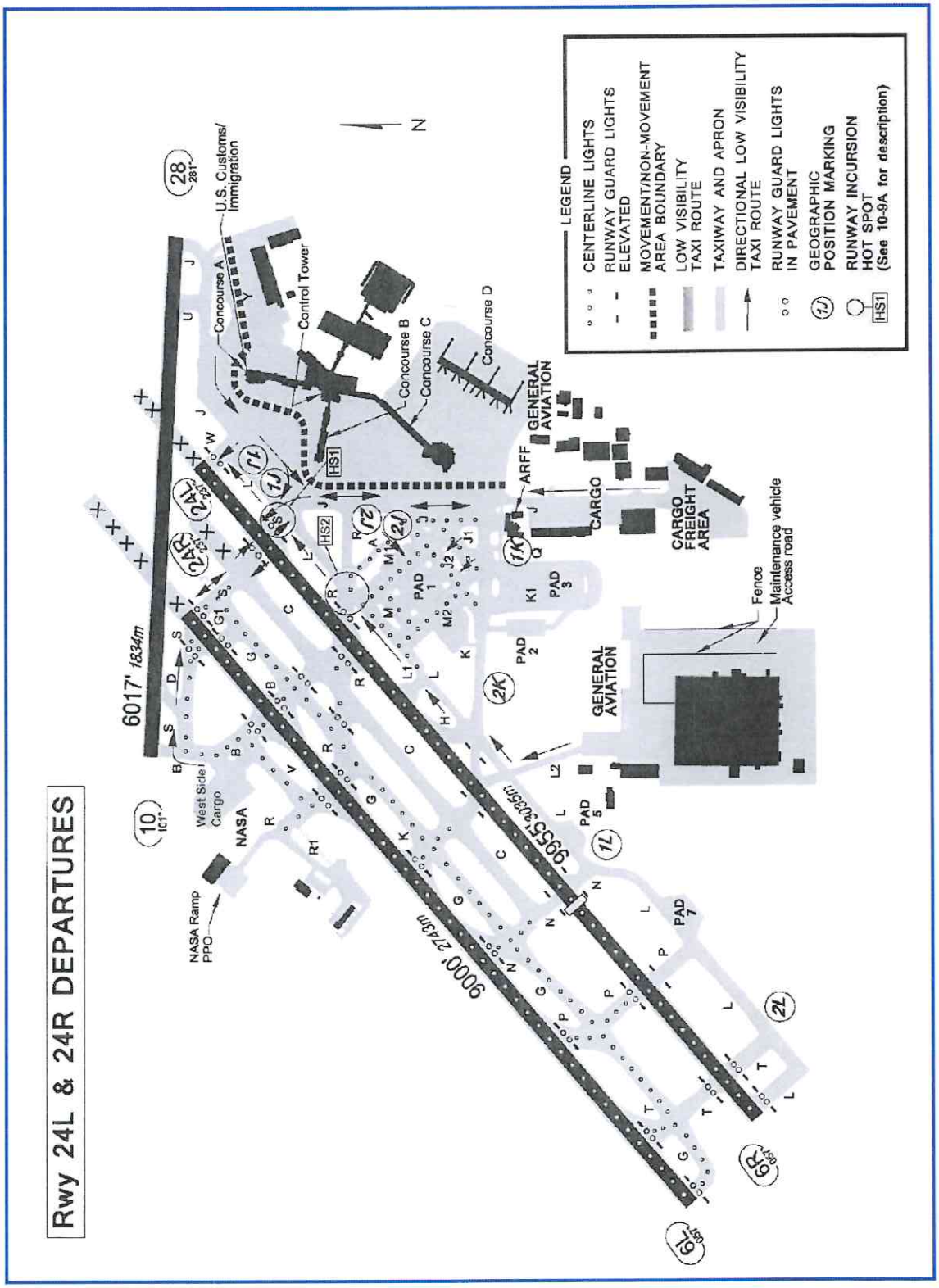
a. Initiate/ terminate this plan as specified in Section 6.
b. Coordinate with the Airport Operations Department prior to implementing the SMGCS plan.
c. Provide progressive instructions to ARFF and other pertinent responders during an emergency.
d. Maintain ground separation between aircraft and vehicles in the movement areas utilizing taxiway geographical hold positions or other approved procedures as appropriate. The ATCT will monitor aircraft movements with ASDE-3 / AMASS system.
e. Announce SMGCS is in effect on the ATIS.

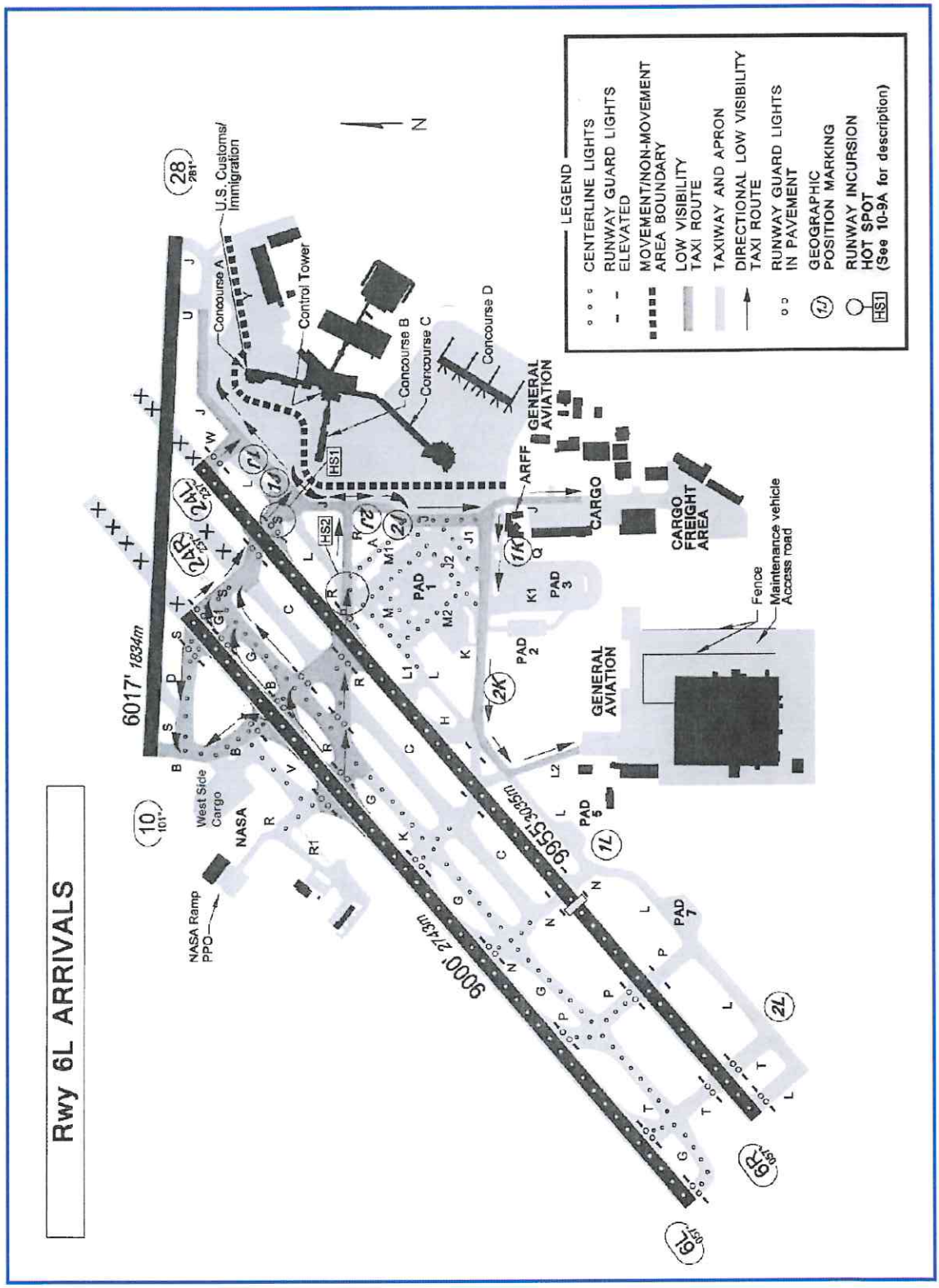
## 8.3 Airport Tenants

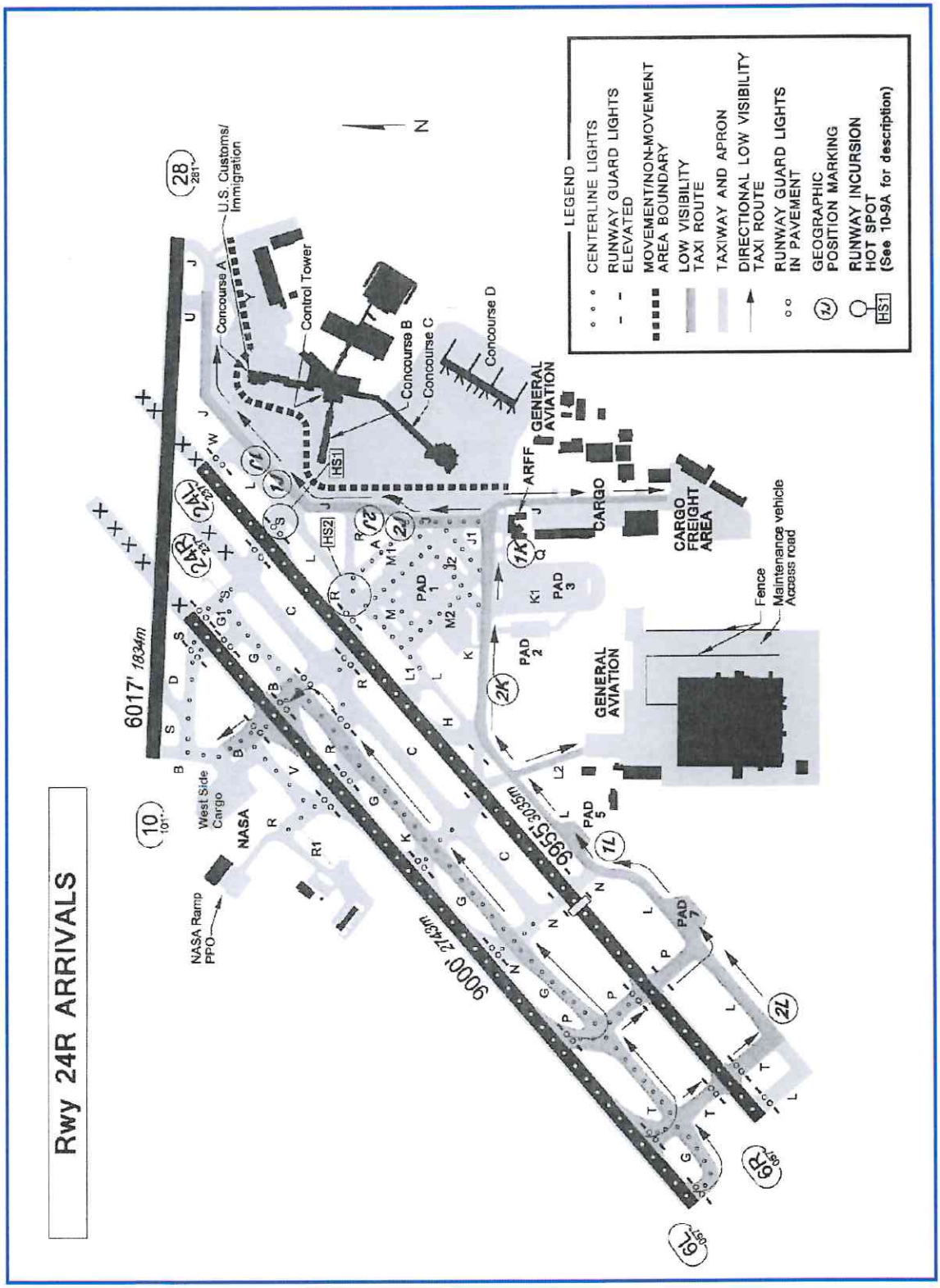
a. Participate in the SMGCS working group.
b. Disseminate low-visibility procedures to company employees.
c. Appropriately train their personnel in low-visibility procedures.
d. Provide airport charts to all vehicle operators depicting low-visibility taxi routes, movement area, non-movement areas, and designated ramp control areas with appropriate ramp control frequencies.
e. Provide ramp control as assigned in the non-movement areas.
f. Enforce SMGCS plan driving procedures and, if authorized, conduct driver training.

## *Exhibit-1, Low-Visibility Taxi Route Charts*




Rwy 24L & 24R DEPARTURES
LEGEND
CENTERLINE LIGHTS
RUNWAY GUARD LIGHTS ELEVATED
MOVEMENT/NON-MOVEMENT AREA BOUNDARY
LOW VISIBILITY TAXI ROUTE
TAXIWAY AND APRON
DIRECTIONAL LOW VISIBILITY TAXI ROUTE
RUNWAY GUARD LIGHTS IN PAVEMENT
GEOGRAPHIC POSITION MARKING
RUNWAY INCURSION HOT SPOT (See 10-9A for description)
N
U.S. Customs/ Immigration
Concourse A
Control Tower
Concourse B
Concourse C
Concourse D
GENERAL AVIATION
ARFF
CARGO
CARGO FREIGHT AREA
Fence
Maintenance vehicle Access road
GENERAL AVIATION
West Side Cargo
NASA
NASA Ramp PPO
6017' 1834m
9955' 3035m
9000' 2743m
PAD 1
PAD 2
PAD 3
PAD 5
PAD 7
HS1
HS2


Rwy 6L ARRIVALS
LEGEND
CENTERLINE LIGHTS
RUNWAY GUARD LIGHTS ELEVATED
MOVEMENT/NON-MOVEMENT AREA BOUNDARY
LOW VISIBILITY TAXI ROUTE
TAXIWAY AND APRON
DIRECTIONAL LOW VISIBILITY TAXI ROUTE
RUNWAY GUARD LIGHTS IN PAVEMENT
GEOGRAPHIC POSITION MARKING
RUNWAY INCURSION HOT SPOT (See 10-9A for description)
N
U.S. Customs/ Immigration
Concourse A
Control Tower
Concourse B
Concourse C
Concourse D
GENERAL AVIATION
ARFF
CARGO
CARGO FREIGHT AREA
Fence
Maintenance vehicle Access road
GENERAL AVIATION
West Side Cargo
NASA
NASA Ramp
PPO
6017' 1834m
9955' 3035m
9000' 2743m
PAD 1
PAD 2
PAD 3
PAD 5
PAD 7
HS1
HS2


Rwy 24R ARRIVALS
LEGEND
CENTERLINE LIGHTS
RUNWAY GUARD LIGHTS ELEVATED
MOVEMENT/NON-MOVEMENT AREA BOUNDARY
LOW VISIBILITY TAXI ROUTE
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DIRECTIONAL LOW VISIBILITY TAXI ROUTE
RUNWAY GUARD LIGHTS IN PAVEMENT
GEOGRAPHIC POSITION MARKING
RUNWAY INCURSION HOT SPOT (See 10-9A for description)
N
6017' 1834m
9955' 3035m
9000' 2743m
U.S. Customs/ Immigration
Concourse A
Control Tower
Concourse B
Concourse C
Concourse D
GENERAL AVIATION
ARFF
CARGO
CARGO FREIGHT AREA
Fence
Maintenance vehicle Access road
PAD 1
PAD 2
PAD 3
PAD 5
PAD 7
West Side Cargo
NASA
NASA Ramp PPO
HS1
HS2

## *Exhibit-2, ATCT Letter of Agreement – SMGCS*

CLEVELAND HOPKINS INTERNATIONAL AIRPORT AND
CLEVELAND HOPKINS AIR TRAFFIC CONTROL TOWER

### LETTER OF AGREEMENT

EFFECTIVE: January 28, 2013

SUBJECT: LOW VISIBILITY PROCEDURES

1. **PURPOSE.** To provide operating procedures for conducting takeoff and landing operations during visibility conditions below 1200 RVR, down to and including 600 feet, consistent with the requirements of the CLE Surface Movement Guidance and Control System Plan (CLE SMGCS Plan).

2. **DISTRIBUTION.** Cleveland Hopkins Air Traffic Control Tower (CLE ATCT) and Cleveland Hopkins International Airport (CLE OPS).

3. **CANCELLATION.** New Letter of Agreement.

4. **SCOPE.** The procedures contained herein shall apply to Cleveland Hopkins International Airport when the visibility is reported below 1200 feet RVR, down to and including 600 feet.

5. **RESPONSIBILITIES.** CLE ATCT and CLE OPS shall coordinate the implementation of Low Visibility Procedures in accordance with the Surface Movement Guidance and Control System Plan, for Cleveland Hopkins International Airport (current edition).

Vincent V. Shobe
Air Traffic Manager
Cleveland Hopkins Airport Traffic Control Tower

Ricky D. Smith
Director, Department of Port Control
City of Cleveland